

CLAIMS

1. A congestion controller for an Ethernet switch comprising

5 a plurality of transmission queues which have different priorities,

a receiving means for receiving a PAUSE frame,

10 a restriction means for restricting transmission traffic from the transmission queues by the received PAUSE frame, wherein

15 the restriction means restricts the transmission traffic from a transmission queue of the lowest priority by the PAUSE frame received at a time other than the PAUSE time, and restricts the transmission traffic from the transmission queue of the higher priority, by the PAUSE frame received during the PAUSE time.

2. A congestion controller for an Ethernet switch comprising

20 a transmission queue,

a receiving means for receiving a PAUSE frame,

25 a shaping means for shaping the transmission traffic from the transmission queue by the received PAUSE frame, wherein

the shaping means restricts transmission speed of the transmission traffic from the transmission queue to or below a transmission speed based on a predetermined shaping value.

30 3. A congestion controller according to Claim 2 in which the restriction of the transmission speed is performed by providing a gap in the transmission traffic.

4. A congestion controller for an Ethernet switch comprising

35 a transmission queue,

an identifying means for identifying an input port which causes congestion by counting packets

resident in the transmission queue, corresponding to the input port, and

5                   a transmission means for transmitting a PAUSE frame to other switch which is connected to the identified input port.

5.   A congestion controller according to Claim 4 in which

10                  the identifying means further identifies an application of the identified input port based on the attributes of the packets, and

                     the transmission means notifies the other switch of the identified application by a PAUSE frame transmitted thereto.